

FIGURES AND SEQUENCES (600-1-285P)

(locations of polymorphisms or sites of polymorphisms appear in bold underline)

FIGURE 1 AND SEQ ID NO:1

wild-type hKOR

1 atgactcccc cgatccagat cttccgcggg gagccgggcc ctacctgcgc cccgagcgc
61 tgcctgcccc ccaacagcag cgcctggtt cccggctggg ccgagcccga cagcaacggc
121 agcgcggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catcccggtc
181 atcatcacgg cggtctactc cgtagtgttc gtcgtggcgt tggtggcaa ctcgctggtc
241 atgttgcgtga tcatacgata cacaaagatg aagacagcaa ccaacattna catatttaac
301 ctggctttgg cagatgctt agttactaca accatgcctt ttcagagttac ggtctacttg
361 atgaattcct ggcctttgg ggatgtgctg tgcaagatag taatttccat tgattactac
421 aacatgttca ccagcatctt cacccgtacc atgatgagcg tggaccgcta cattgcccgtg
481 tgcccaccccg tgaaggctt ggacttccgc acacccttga aggcaaagat catcaatata
541 tgcatctggc tgctgtcgct atctgttggc atctctgcaa tagtccttgg aggcacccaaa
601 gtcagggaaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
661 tggtgggacc tcttcatgaa gatctgcgtc ttcatctttg cttcgatgc ctctgttc
721 atcatcatcg tctgctacac cctgatgatc ctgcgtctca agagcgtccg gtcctttct
781 ggctcccgag agaaagatcg caacctgcgtt aggttaccca gactggtctt ggtggtggt
841 gcattctccg tcgtctgctg gactcccatt cacatattca tcctggtggaa ggctctgggg
901 agcacctccc acagcacagc tgctctctcc agcttattact tctgcatagc cttaggttat
961 accaacagta gcctgaatcc cattctctac gcctttctt atgaaaat caagcgggt
1021 ttccgggact tctgctttcc actgaagatg aggttggagc ggcagagcac tagcagatgc
1081 cggaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
1141 tgacttagtcg tgga

FIGURE 2 AND SEQ ID NO:2

C852T polymorphism of hKOR

1 atggactccc cgatccagat cttcccgccc gagccggcc ctacctgcgc cccgagcgc
61 tgcctgcccc ccaacagcag cgccctggttt cccggctggg ccgagcccgaa cagcaacggc
121 agcgccggct cggaggacgc gcagctggag cccgcgcaca tctcccccgc catcccggtc
181 atcatcacgg cggctactc cgtagtgttc gtcgtggct tgggtggcaa ctcgctggtc
241 atgttcgtga tcataccgata cacaaaagatg aagacagcaa ccaacattta catatttaac
301 ctggctttgg cagatgctt agttactaca accatgcctt ttcaagatgc ggtctacttg
361 atgaattcct ggcctttgg ggatgtgctg tgcaagatag taatttccat tgattactac
421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg
481 tgccaccccg tgaaggctt ggacttccgc acacccttga aggcaaagat catcaatatc
541 tgcatctggc tgctgtcgatc atctgttggc atctctgc aa tagtccttgg aggcacccaa
601 gtcagggaaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
661 tgggtggacc tcttcatgaa gatctgcgtc ttcatctttg ccttcgtat ccctgtcc

1 721 atcatcatcg tctgctacac cctgatgatc ctgcgtctca agagcgtccg gtcctttct
2 781 ggctcccgag agaaagatcg caacctcggt aggatcacca gactggctt ggtgggtgg
3 841 gcagtttcg ttgtctgctg gactcccatt cacatattca tcctggtgga ggctctgggg
4 901 agcacctccc acagcacacgc tgctctctcc agctattact tctgcatgc cttaggctat
5 961 accaacagta gcctgaatcc cattctctac gccttcttgc atgaaaat caagcgggt
6 1021 ttccgggact tctgcttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
7 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
8 1141 tgacttagtcg tgga
9

10 **FIGURE 3 AND SEQ ID NO:3**

11 **C948T polymorphism of hKOR**

12 1 atggactccc cgatccagat cttccgcggg gagccgggcc ctacctgcgc cccgagcgcc
13 61 tgcctgcccc ccaacagcag cgccttgtt cccggctggg ccgagccggca cagcaacggc
14 121 agcgcccgtt cggaggacgc gcagctggag cccgcgcaca tctccccggc catccccgtc
15 181 atcatcacgg cggttactc cgtatgttgc gtcgtgggtt tggtggcaa ctcgctggtc
16 241 atgttcgtga tcatccgata cacaaagatg aagacagcaa ccaacatttacatatttaac
17 301 ctggcttgg cagatgcttttt agtttactaca accatgcccct ttccagagtgac ggtttacttgc
18 361 atgaattcct ggctttgg ggatgtgctg tgcaagatat taatttccat tgattttac
19 421 aacatgttca ccagcattt cacttgacc atgatgagcg tggaccgcta cattgccgtg
20 481 tgccacccccg tgaaggctt ggactttccgc acaccttga aggcaaagat catcaatatc
21 541 tgcatctggc tgctgtcgtc atctgtttgc atctctgcaa tagtcttgg aggccacccaa
22 601 gtcagggaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
23 661 tggtggacc tcttcatgaa gatctgcgt ttcattttg ccttcgtgat ccctgtcctc
24 721 atcatcatcg tctgctacac cctgatgat ctgcgtctca agagcgtccg gtccttttct
25 781 ggctccccgag agaaagatcg caacctcggt aggatcacca gactggct ggtgggtgg
26 841 gcagtttcg ttgtctgctg gactcccatt cacatattca tcctggtgga ggctctgggg
27 901 agcacctccc acagcacagc tgctctctcc agctattact tctgcattgc cttaggctat
28 961 accaacagta gcctgaatcc cattctctac gccttctttg atgaaaat caagcgggt
29 1021 ttccgggact tctgcttcc actgaagatg aggatggaggc ggcagagcac tagcagagtc
30 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
31 1141 tgacttagtcg tgga
32

33 **FIGURE 4 AND SEQ ID NO:4**

34 **C1008T polymorphism of hKOR**

35 1 atggactccc cgatccagat cttccgcggg gagccgggcc ctacctgcgc cccgagcgcc
36 61 tgcctgcccc ccaacagcag cgccttgtt cccggctggg ccgagccggca cagcaacggc
37 121 agcgcccgtt cggaggacgc gcagctggag cccgcgcaca tctccccggc catccccgtc
38 181 atcatcacgg cggttactc cgtatgttgc gtcgtgggtt tggtggcaa ctcgctggtc
39 241 atgttcgtga tcatccgata cacaaagatg aagacagcaa ccaacatttacatatttaac
40 301 ctggcttgg cagatgcttttt agtttactaca accatgcccct ttccagagtgac ggtttacttgc
41 361 atgaattcct ggctttgg ggatgtgctg tgcaagatat taatttccat tgattttac
42 421 aacatgttca ccagcattt cacttgacc atgatgagcg tggaccgcta cattgccgtg

1 481 tgccaccccg tgaaggctt ggactccgc acacccttga aggcaaagat catcaatatac
2 541 tgcacatctggc tgctgtcgac atctgttggc atctctgaa tagtccttgg aggcacccaaa
3 601 gtcagggaaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
4 661 tggtgtggacc tcttcatgaa gatctgcgtc ttcatctttg ccttcgtgtat ccctgtcctc
5 721 atcatcatcg tctgtacac cctgtatgtc ctgcgtctca agagcgtccg gtcctttct
6 781 ggctcccgag agaaaagatcg caacctgcgt aggatcacca gactggtctt ggtgggtgt
7 841 gcagtttcg tgttgcgtg gactccatt cacatattca tcctggtggaa ggctctgggg
8 901 agcacctccc acagcacagc tgctcttcc agctattact tctgcatgc cttaggctat
9 961 accaacagta gcctgaatcc cattcttac gcctttctt atgaaattt caagcgggt
10 1021 ttccggact tctgtttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
11 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
12 1141 tgacttagtcg tgga
13

14 **FIGURE 5 AND SEQ ID NO:5**

15 **G36T polymorphism of hKOR**

16 1 atggactccc cgatccagat cttccgcggg gagcctggcc ctacctgcgc cccgagcgcc
17 61 tgcctgcccc ccaacagcag cgcctgggtt cccggctggg ccgagcccgaa cagcaacggc
18 121 agcgcgggtc cggaggacgc gcagctggag cccgcgcaca tctccccggc catccggtc
19 181 atcatcacgg cggtctactc cgtagtgttc gtctgggtc tgggtggcaa ctgcgtggc
20 241 atgttcgtga tcacccata cacaaagatg aagacagcaa ccaacatttta catatttaac
21 301 ctggctttgg cagatgctt agttactaca accatgccct ttcagagtag ggtctacttg
22 361 atgaattccct ggcctttgg ggatgtgctg tgcaagatag taatttccat tgattactac
23 421 aacatgttca ccagcatctt cacccgtacc atgatgagcg tggaccgcata cattggcg
24 481 tgccaccccg tgaaggctt ggactccgc acacccttga aggcaaagat catcaatatac
25 541 tgcacatctggc tgctgtcgac atctgttggc atctctgaa tagtccttgg aggcacccaaa
26 601 gtcagggaaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
27 661 tggtgtggacc tcttcatgaa gatctgcgtc ttcatctttg ccttcgtgtat ccctgtcctc
28 721 atcatcatcg tctgtacac cctgtatgtc ctgcgtctca agagcgtccg gtcctttct
29 781 ggctcccgag agaaaagatcg caacctgcgt aggatcacca gactggtctt ggtgggtgt
30 841 gcagtttcg tgttgcgtg gactccatt cacatattca tcctggtggaa ggctctgggg
31 901 agcacctccc acagcacagc tgctcttcc agctattact tctgcatgc cttaggctat
32 961 accaacagta gcctgaatcc cattcttac gcctttctt atgaaattt caagcgggt
33 1021 ttccggact tctgtttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
34 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
35 1141 tgacttagtcg tgga
36

37 **FIGURE 6 AND SEQ ID NO:6**

38 **A843G polymorphism of hKOR**

39 1 atggactccc cgatccagat cttccgcggg gagccggcc ctacctgcgc cccgagcgcc
40 61 tgcctgcccc ccaacagcag cgcctgggtt cccggctggg ccgagcccgaa cagcaacggc
41 121 agcgcgggtc cggaggacgc gcagctggag cccgcgcaca tctccccggc catccggtc
42 181 atcatcacgg cggtctactc cgtagtgttc gtctgggtc tgggtggcaa ctgcgtggc

1 241 atgttcgtga tcatccgata cacaaagatg aagacagcaa ccaacattta catatttaac
2 301 ctggctttgg cagatgctt agttactaca accatgccct ttcagagtac ggtctacttg
3 361 atgaattcct ggcctttgg ggatgtgctg tgcaagatag taatttccat tgattactac
4 421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg
5 481 tgccaccccg tgaaggctt ggacttccgc acacccttga aggcaaagat catcaatata
6 541 tgcatctggc tgctgtcgtc atctgttggc atctctgcaa tagtccttgg aggacacaaa
7 601 gtcagggaaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
8 661 tggtgggacc tcttcatgaa gatctgcgtc ttcatcttgc cttcgtgtat ccctgtcctc
9 721 atcatcatcg tctgctacac cctgatgatc ctgcgtctca agagcgtccg gtcctttct
10 781 ggctcccgag agaaagatcg caacctgcgt aggatcacca gactggtcct ggtggtggtg
11 841 gcaggtttcg tcgtctgctg gactccatt cacatattca tccctgggaa ggctctgggg
12 901 agcacctccc acagcacagc tgctcttcc agctattact tctgcatgc cttaggctat
13 961 accaacagta gcctgaatcc cattctctac gcctttcttgc atgaaaattt caagcgggtgt
14 1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
15 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
16 1141 tgacttagtgc tgga

17 **FIGURE 7 AND SEQ ID NO:7**

18 **C846T polymorphism of hKOR**

19 20 1 atggactccc cgatccagat cttccgcggg gagccgggc ctacctgcgc cccgagcgcc
20 21 61 tgcctgcccc ccaacagcag cgccttgttt cccggctggg ccgagcccgaa cagcaacggc
21 22 121 agccgggt cggaggacgc gcagctggag cccgcgcaca tctcccccggc catcccggtc
22 23 181 atcatcacgg cggttactc cgtatgtgttc gtcgtgggct tggttggcaa ctcgctggc
23 24 241 atgttcgtga tcatccgata cacaaagatg aagacagcaa ccaacattta catatttaac
24 25 301 ctggctttgg cagatgctt agttactaca accatgccct ttcagagtac ggtctacttg
25 26 361 atgaattcct ggcctttgg ggatgtgctg tgcaagatag taatttccat tgattactac
26 27 421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg
27 28 481 tgccaccccg tgaaggctt ggacttccgc acacccttga aggcaaagat catcaatata
28 29 541 tgcatctggc tgctgtcgtc atctgttggc atctctgcaa tagtccttgg aggacacaaa
29 30 601 gtcagggaaag acgtcgatgt cattgagtgc tccttgcagt tcccagatga tgactactcc
30 31 661 tggtgggacc tcttcatgaa gatctgcgtc ttcatcttgc cttcgtgtat ccctgtcctc
31 32 721 atcatcatcg tctgctacac cctgatgatc ctgcgtctca agagcgtccg gtcctttct
32 33 781 ggctcccgag agaaagatcg caacctgcgt aggatcacca gactggtcct ggtggtggtg
33 34 841 gcaggtttcg tcgtctgctg gactccatt cacatattca tccctgggaa ggctctgggg
34 35 901 agcacctccc acagcacagc tgctcttcc agctattact tctgcatgc cttaggctat
35 36 961 accaacagta gcctgaatcc cattctctac gcctttcttgc atgaaaattt caagcgggtgt
36 37 1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
37 38 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atggatgaa taaaccagta
38 39 1141 tgacttagtgc tgga